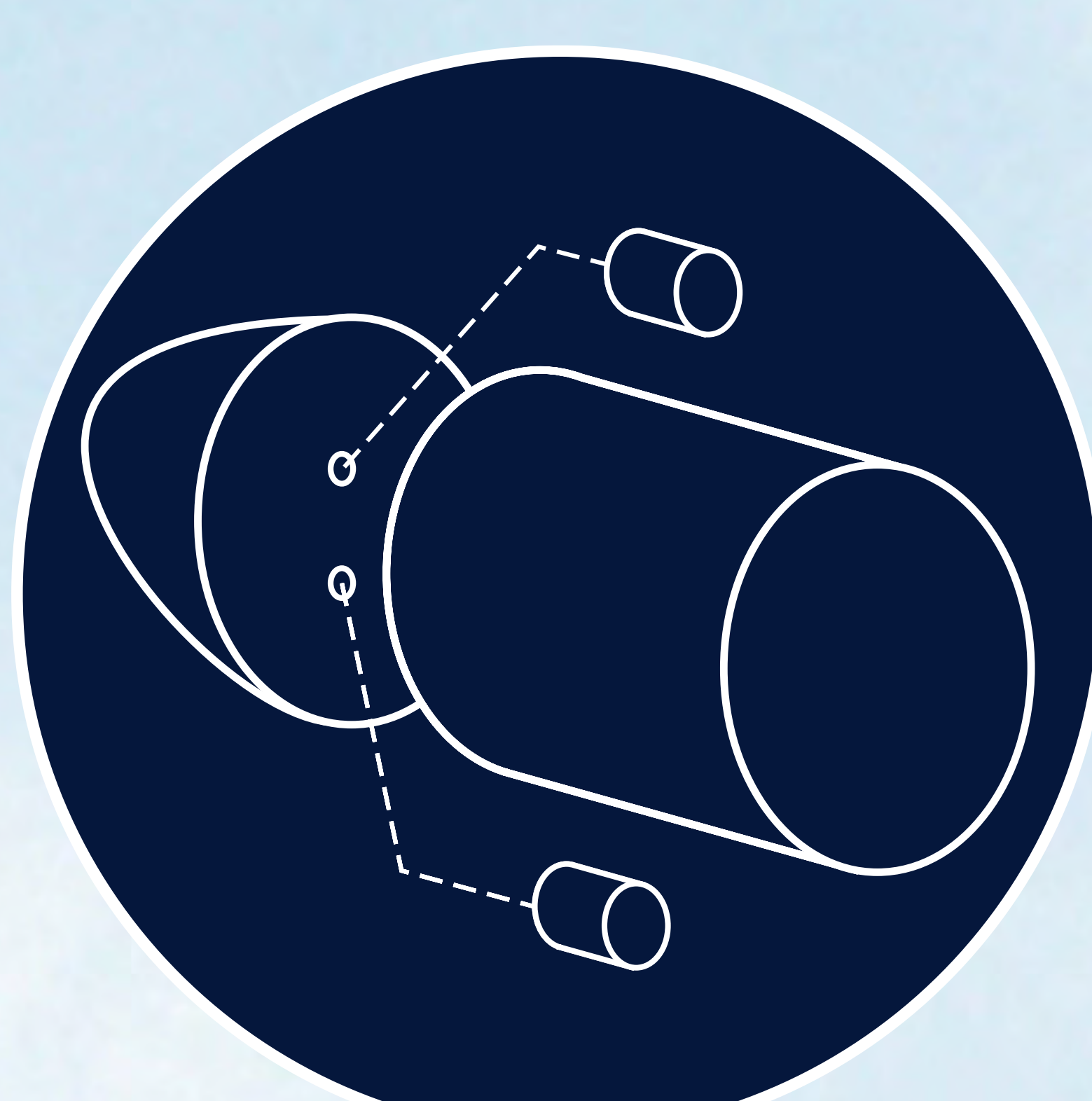


PUEBLO CHEMICAL AGENT-DESTRUCTION PILOT PLANT

The Assembled Chemical Weapons Alternatives program, the U.S. Army Pueblo Chemical Depot and the community worked together to select neutralization followed by biotreatment to destroy the chemical weapons stockpile at the depot.

NEUTRALIZATION FOLLOWED BY BIOTREATMENT

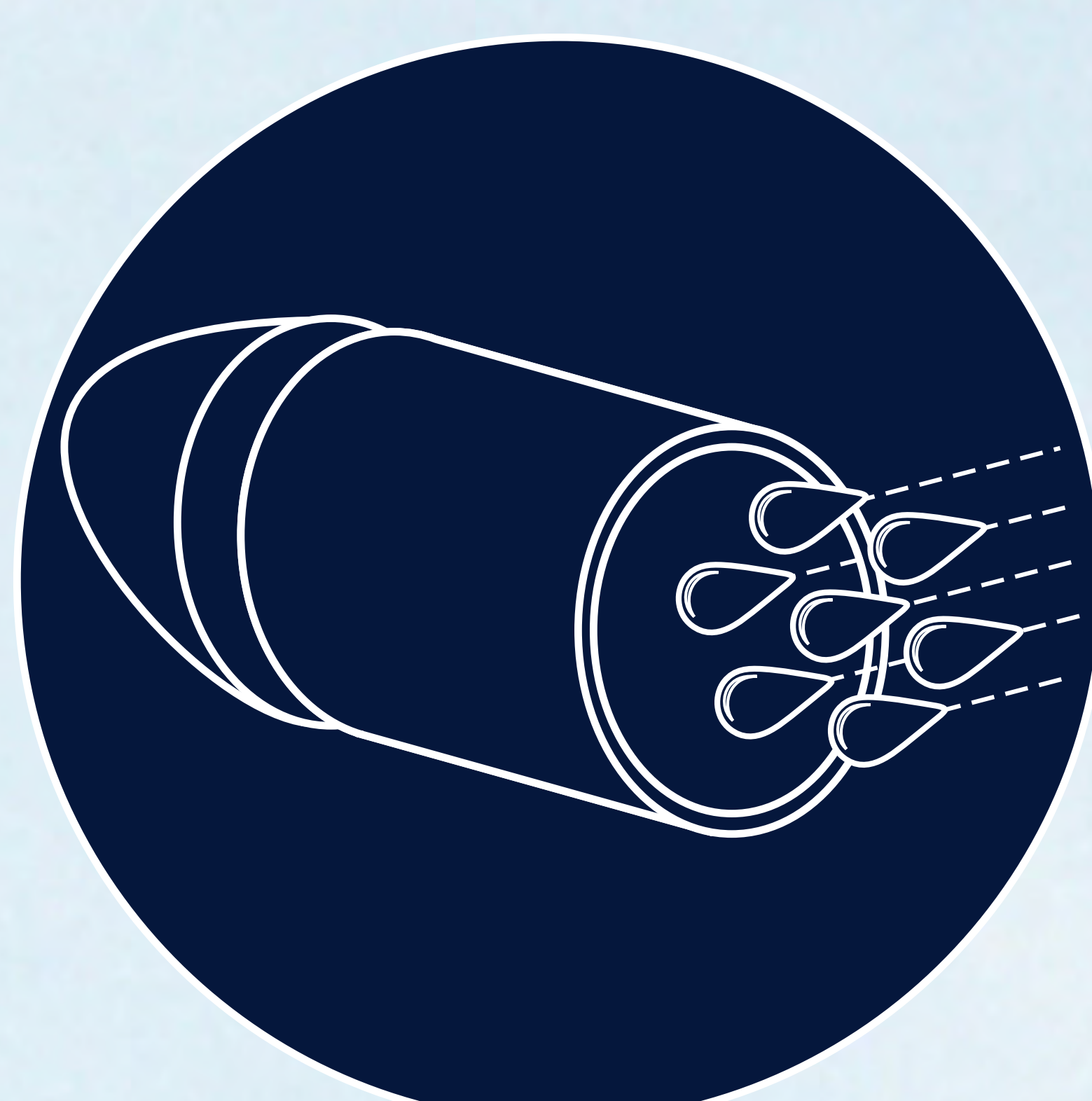
► STEP 1



Removal of Energetics

Robotic equipment removes energetics (explosives) from the weapon.

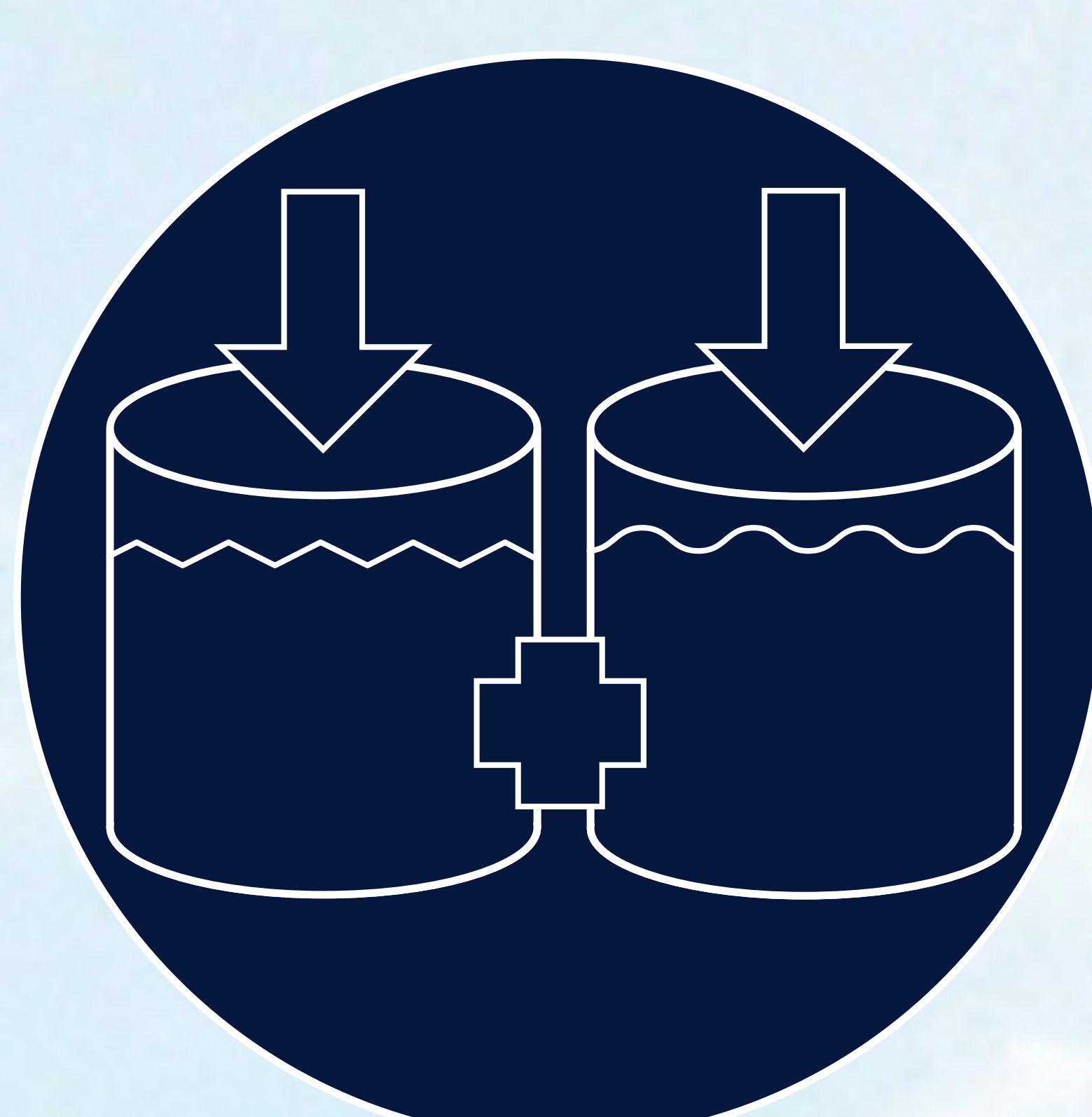
► STEP 2



Removal of Mustard Agent

The inside of the weapon is remotely accessed, and mustard agent is washed out with high-pressure water.

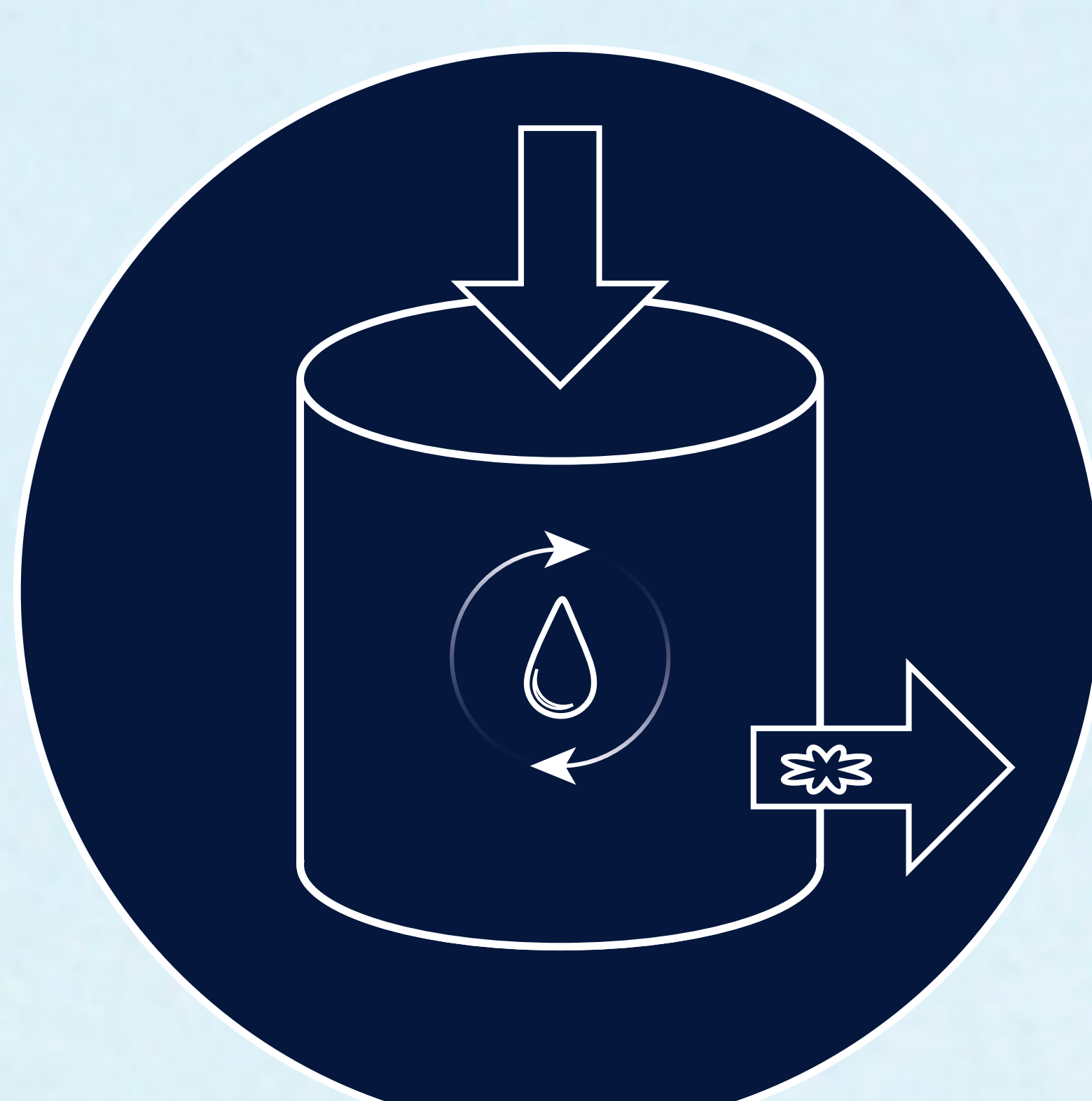
► STEP 3



Neutralization of Energetics and Mustard Agent

Energetics are neutralized with caustic solution, and mustard agent is neutralized with hot water. The byproduct is called hydrolysate.

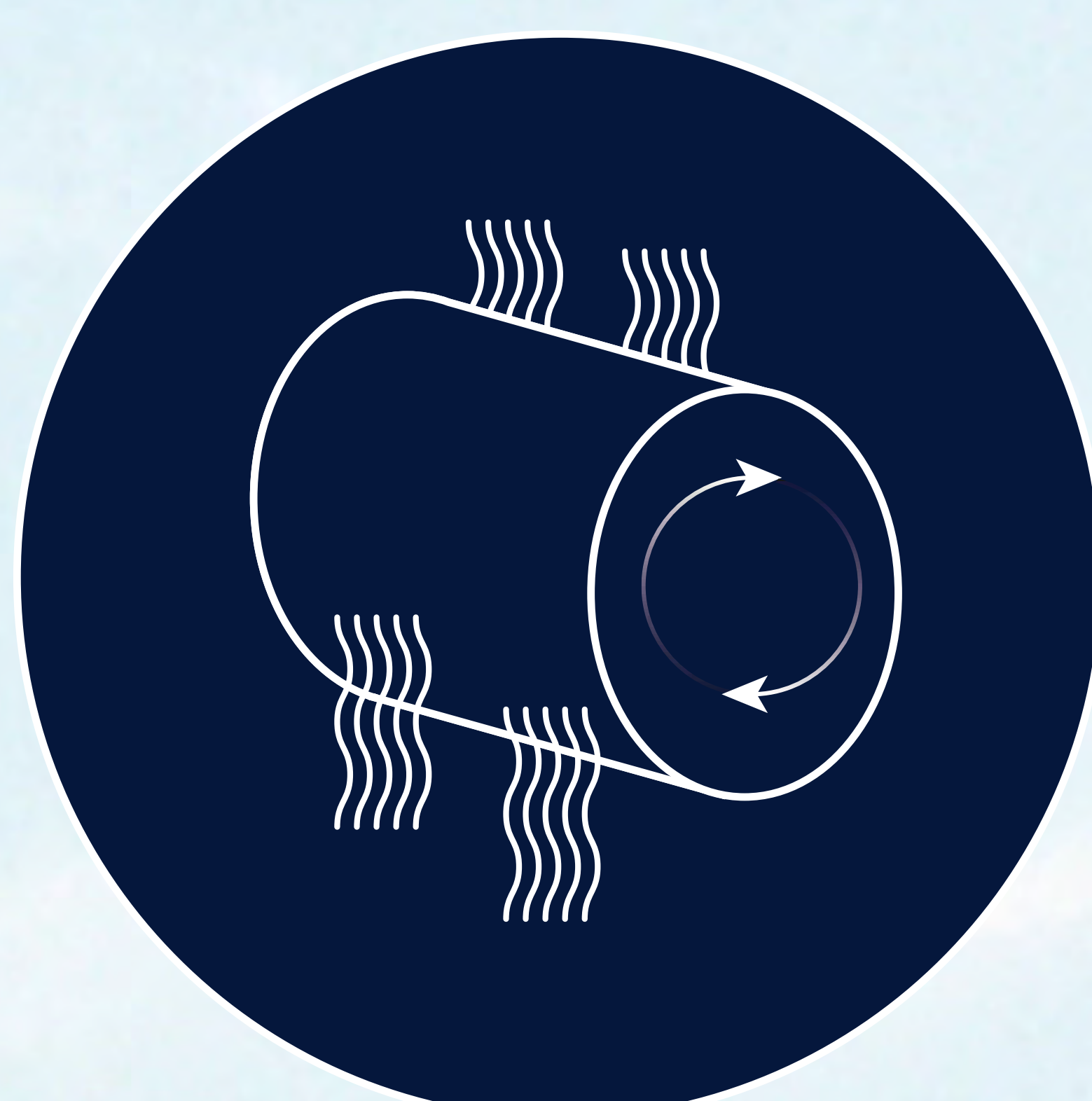
► STEP 4



Biotreatment

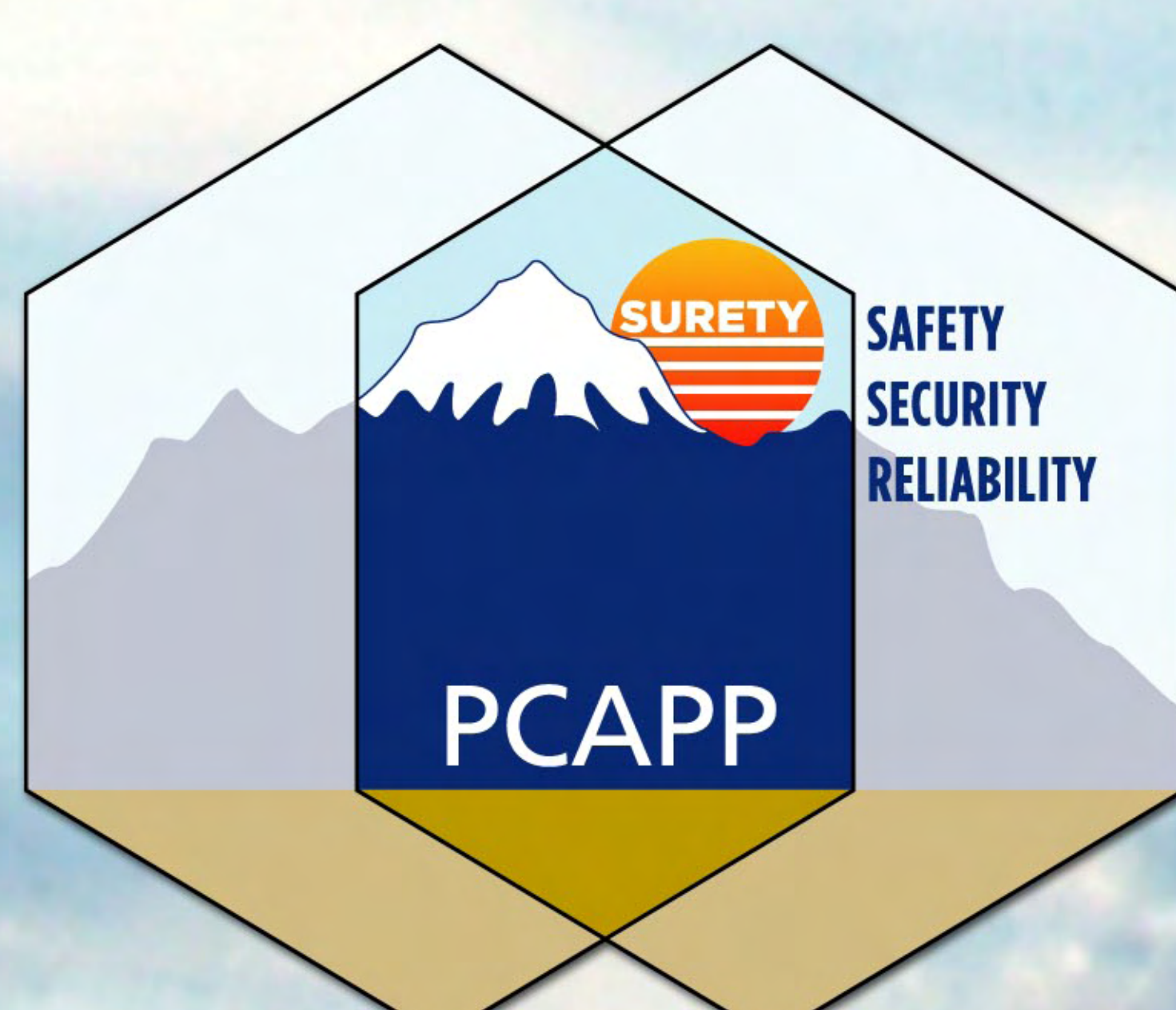
Hydrolysates are treated with microbes that break down the solution into water and biosludge. Water is recycled in the plant, and biosludge is shipped for disposal.

► STEP 5



Disposal of Metal Parts

Metal parts are heated to 1,000 degrees Fahrenheit for 15 minutes and can then be recycled.



Pueblo Chemical Agent-Destruction Pilot Plant